# CITY OF WAVELAND REQUEST FOR PROPOSALS FOR CULVERT INSTALLATION SERVICES

The City of Waveland requests proposals to provide and install culverts and related materials in two separate locations within the City. The City reserves the right to accept the quotes individually, together, or reject all quotes, whichever is deemed to be in the best interest of the City. The projects must be completed within 30 (thirty) calendar days of award or contractor will be subject to liquidated damages in the amount of \$150.00 (One-hundred and fifty dollars) per day. The locations will be in the following City of Waveland rights-of-way, recorded easements and private property:

## Idlewood Dr. and Nicholson Av., Waveland, MS 39576

#### Idlewood Dr., Waveland, MS 39576

The proposed project will include increasing the size of the mouth of a catch basin / inlet on Yarbrough Place and the installation of 140 (one-hundred and forty) linear feet by 15" (fifteen-inches) of polyethylene culvert and 3 (three) 15" Tees (including plastic grates) at 40' (forty-foot) increments as well as filling a sink hole within the utility easement and installing a 12 in. Square Catch Basin (see spec sheet #4) and approximately 30' (thirty) of PVC tying into the 15" culvert (at 100 CAMPION DR).

This installation also should include the use of filter fabric and should be completed with backfilling to the specifications listed in the attached Culvert Spec Sheets (4 pages). A concrete catch basin 4' x 4' level with finished grade and a 2' x 2' iron grate to allow proper drainage. The installation will include removing and replacing approximately 125' (one hundred twenty-five) of privacy fence located along the top of the existing culvert between 2 (two) properties adjacent to the culvert installation site. The installation site should be left as it was before the start of the project 3 pallets of centipede sod should be included. Photos must be taken of the installation site before and after completion of the project to ensure these requirements are met.

The total lump sum cost to provide the services listed above is: \$	or
\$	

### Nicholson Ave., Waveland, MS 39576

The proposed project will begin at 219 and terminate at 311 Nicholson Ave. and will include the installation of approximately 430' (our hundred and thirty) linear feet by 15" (fifteen inch) polyethylene culvert and 10 (ten) Tees at 40' (forty) increments. This installation also includes the use of filter fabric and should be completed with backfilling to the specifications listed in the attached Culvert Spec Sheet (2 pages). The installation site should be left as it was before the start of the project. The installation site should be left as it was before the start of the project and 3 pallets of centipede sod should be included. Photos must be taken of the installation site before and after completion of the project to ensure these requirements are met.

The total lump sum cost to provide the services listed above is: \$	or

#### Combined

The total comb	bine cost of both proje	cts if awarded toge	ether is a total lump	sum cost of
\$	or \$			

Payment for work in this section shall be included in the lump sum price, as outlined above. The quoted price shall consist of all costs of labor, materials, and incidentals as complete. The State of Mississippi Contractor's Licenses proof of liability insurance in the amount of \$1,000,000 (one million dollars) and bond (if required) should be included in your proposal.

Sealed proposals should be marked on the outside of the envelope "REQUEST FOR PROPOSALS FOR CULVERT INSTALLATION SERVICES" and must include one (1) original and two (2) copies. If you are submitting a proposal for an individual project (Idlewood Dr. and Nicholson Ave.), the envelope should be marked on the outside "REQUEST FOR PROPOSAL FOR CULVERT INSTALLATION AT (insert street name or both here) SERVICES." If your proposal exceeds \$50,000 (fifty thousand dollars), please write, "THIS PROPOSAL EXCEEDS \$50,000" on the envelope housing your proposal.

If any proposal exceeds \$50,000 (fifty thousand dollars), that proposal will not be opened. If all proposals exceed \$50,000.00 (fifty thousand dollars), all quotes will be rejected unopened and State Bidding Procedures will be implemented.

Each proposal submitted must follow the previous guidelines and should be submitted by U.S. mail, overnight service, or hand-delivered no later than 12:00 p.m. on April 16, 2021, to:

City of Waveland Purchasing Clerk, Katharine Corr 301 Coleman Ave. Waveland, MS 39576

Proposals shall be opened at 2:30 p.m. the same day in the **CONFERENCE ROOM** at City Hall. You may have (1) one representative from your company present at the opening of submitted proposals. The representative will be required to wear the proper personal protective equipment while in the building and will be required to enact social distancing according to CDC guidelines. The City of Waveland reserves the right to cancel this RFP at any time without prior notice, to reject all proposals and to waive informalities at the City's discretion. The City of Waveland is an equal opportunity service provider.

Any questions regarding proposals should be emailed to <u>kcorr@waveland-ms.gov</u> or you may call her at 228.467.4134.

# **CULVERT SPECIFICATIONS**

#### **GENERAL**

#### 1. Polyethylene Culvert Pipe:

- a. Pipe shall be type S.
- b. Pipe shall have a full circular cross-section with an outer corrugated pipe wall and a smooth inner liner.
- c. Corrugations may be either annular or helical.
- d. Pipe and fittings shall be made of virgin polyethylene compounds which conform with the requirements of Type III, Category "4" or "5", Grade P34, Class C as described in ASTM D1248.
- e. Polyethylene Pipe Joints: Joints shall be watertight rubber gasketed type furnished by the manufacturer.
- f. Nominal size for the pipe and fittings is based on the nominal inside diameter of the pipe.

#### **EXECUTION**

#### 1. Installation:

- a. Trench Excavation
- b. Make width of trench sufficient to permit thorough tamping of the backfill under and around the pipe but no greater than Outside Diameter plus 18 inches.
- c. Where no headwalls are included, the area around the ends of the culverts shall be graded for proper drainage.

#### 2. Laying Pipe:

- a. Install batter boards, laser equipment, etc. to provide proper line and grade.
- b. Inspect pipe before laying and remove any damaged or defective pipe from the job and replace at Contractor's sole expense.
- c. Begin laying at the lowest end of culvert.
- d. Thoroughly clean ends of the pipes.
- e. Place each section with the spigot end pointing in the direction of flow and with the bell end, upstream.

- f. Make assembly of the joint in accordance with the recommendations of the manufacturer.
- g. Wrap joints with filter fabric prior to backfilling
- h. The joint shall be covered with a 36-inch piece of fabric (1.5 feet either side of the joint) and lapped a minimum of 50 percent of pipe circumference.

#### 3. Head Wall:

- a. Bank to bank, not to exceed height of current street
- b. Minimum concrete thickness of 6" (inches)
- c. Rebar #4 on 12" (inch) centers.
- 4. Culvert Junction Box or Drain Inlet (concrete):
  - a. Pipe openings shall be aligned to that of the pipe entering and leaving the structure. Pipe shall be properly aligned with connections to inlets or catch basins as shown on the drawings. Where connections are not shown on drawings, pipe shall terminate flush with the inside of the structure wall.
  - b. Minimum wall, floor and lid thickness of 6" (inches)
  - c. Rebar #4 on 12" (inch) centers
  - d. Grate should be HS20 Traffic loading

#### 5. Filter Fabric:

- a. Polypropylene, polyethylene, polyester, and/or nylon continuous filament fabric with an equivalent opening size of 70 opening openings per inch.
- b. Equivalent opening size of 70 opening openings per inch.
- c. Dry grab strength (ASTM D 1682) shall be at least 120 pounds
- d. Dry grab elongation (ASTM D 1682) shall be no more than 60 percent.
- e. The fabric shall be Ter-Tex SD distributed by WEBTEC, Charlotte, North Carolina or equal.

#### 6. Backfilling:

- a. Compact each lift with pneumatic tampers to 95 percent of maximum density as determined by ASTM D1557.
- b. Be careful to compact the backfill solidly under the pipe

- c. Wet backfill material if necessary, for optimum moisture content prior to compaction.
- d. Backfill above the pipe zone with granular fill place in 8-inch loose lifts and compact to 95 percent of its maximum density as determined by the ASTM D1557.
- e. Hand tamping will not be permitted
- f. Excess Excavation: Disposal of excavation not required for backfill off the site.
- g. Pipe Embedment Zone: The area of the trench in the immediate vicinity of the installed pipe, where special materials and construction techniques are required by this specification to ensure proper installation of the pipeline.
- h. Suitable backfill material shall be free from frozen lumps, refuse, rocks, larger than 3 inches in any dimension, or other material that might cause damage to the pipe, capacity for the expected superimposed loads.

#### 7. Concrete:

a. All concrete shall be 3000 psi.

#### 8. Pre-Cast Concrete

- a. By submittal of precast structures by the Contract, the Contractor will assume any cost associated with modifications to the structures as required by adjustments encountering subsurface obstructions/conflicts.
- b. Precast sections shall comply with ASTM C-857 Standard Practice for Minimum Structural Design Loading for Underground Precast Concrete Utility Structures for inlets and catch basins where applicable or as shown on the drawings.

#### 9. Cast In Place Concrete

- a. Cast in place concrete and all materials and labor involved shall generally meet the applicable sections referenced in the 2017 Mississippi Standard Specifications for Road and Bridge Construction.
- b. The Contractor shall submit 1 copy of the following documentation to the Engineer for review and approval 14 days prior to placing any concrete
- c. Mix designs shall be proportioned in accordance with Chapter 3 of ACI 301. Submit mix designs for each combination of ingredients on each class of concrete for review.
- d. Prior to placing reinforcing steel, the contractor shall submit the following for review by the owner:
  - 1) Bar lists for fabrication of reinforcing steel.
  - 2) Certified mill test reports for each bar size for each heat of reinforcing steel delivered.

- e. Reinforcing bars shall be deformed billet-steel bars, plain finish meeting ASTM A615.
- f. Formwork design, installation, and removal shall be in accordance with ACI 347 except as modified herein. Wall and soil supported member forms may be removed after 48 hours provided the concrete is sufficiently hard not to be damaged by form removal, and provided curing operations start immediately.
- g. The finished structure shall be evaluated for acceptability in accordance with Chapter 18 of ACI 301. The contractor shall pay costs incurred for additional testing, analyses, and any corrective work required when the structure is found to be deficient in strength or other specified characteristics.

Idlewood Drive Project:

Drain to be used at 100 CAMPION DR

The 12 in. Square Catch Basin

Connect to a 4 in. Sewer and Drain, Single-Wall Corrugated and Triple-Wall Pipes and 4 in. Sch. 40 Pipe.

12 in. square plastic grate has an open surface area of 53.1 sq. in., 162 GPM flow rate

Keyed side openings lock outlet adapters in place; knockout on bottom for additional keyed opening if needed

Four weephole knockouts on bottom to eliminate stagnant water

Outlet adapters provide a secure, soil-tight fit to pipe—no tape or glue required; included plug fits inside outlet adapter and seals catch basin opening to direct flow of water

Catch basin made of polypropylene (PP), Grate made of high-density polyethylene (HDPE), both made with a combination of virgin and recycled content treated with UV inhibitors to prevent fading and cracking

Kit includes 12 in. Catch Basin Drain with 2 side openings and knockout for bottom opening, 2 Outlet Adapters, 1 Plug, Plastic Drain Grate.

